# WHAT NEEDS TO BE SUBMITTED FOR REVIEW AND APPROVAL?

What must be submitted for State Fire Marshal's Office (SFMO) approval depends on the answer to three main questions:

- 1. Does it meet the SFMO's definition of construction?
- 2. What kind of occupancy is it?
- Where is it located?

### What is construction?

To answer the first question we must refer to the definition of construction as contained in SFMO rules which are available at Tennessee's Secretary of State's office. The particular rule is <u>0780-2-3</u>. Tennessee rule 0780-2-3-.01(1)(b) defines "construction" as "...the erection of a new building, an addition to an existing building, a change of occupancy, an alteration that alters the exit arrangement, fire resistive assemblies, or type of construction, or involves the installation of fire suppression or detection systems or fuel-fired equipment. The term "construction" shall not be construed to include excavation or site preparation."

The "erection of a new building" and "an addition to an existing building" are intuitive in that most people have no difficulty envisioning building new space on a job site. Where "construction" gets more obscure is a "change of occupancy". Occupancy is simply predefined use classifications as found in NFPA 101, Life Safety Code. The SFMO considers "change of occupancy" as construction whether or not any single thing is modified. This may seem like a huge waste of everyone's time, but it isn't. People must realize, the SFMO exist for benefit of public safety from fire and other threats to persons and property. Assuming that a building is just fine, perfect in every way for a give use (assume storage for the sake of argument) and a new owner, or even the same owner decides to use it for a different use like a day care. Under such a case, it is easy to conceptualize that the design requirements for a building were babies and small children are cared for would be significantly different than that of a warehouse. Looking at it from a life safety viewpoint, "change of occupancy" begins to become more intuitive.

Any modification of exit arrangement or fire resistive assemblies while not as indisputable as scraping off a spot of land and pouring a foundation, either changing exiting or fire resistive elements such as corridor walls, doors, floor/ceiling assemblies can surely be understood to impact fire and life safety. As a justifiable result, the SFMO considers "an alteration that alters the exit arrangement" and "an alteration that alters fire resistive assemblies" as construction.

Continuing an overall theme of fire and life safety, "the installation of fire suppression or detection systems" clearly would be of concern to the State Fire Marshal. Fixed fire suppression systems whether entire building or part, general building or appliance related (such as a commercial grease collection hood) all are classified as fire suppression systems. There is no single system fundamentally and idealistically more important to fire and life safety than the fire alarm. Fire alarms don't go on vacation, don't quit, and are always watching out for the occupants and often monitor critical equipment such as sprinkler systems or control crucial fire and life safety systems such as elevators used by the responding fire department, smoke control systems in exit stairways, and atria. A properly designed fire alarm quite often does much more than detect smoke and as such any modification in such a system is considered construction.

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The "installation of fuel-fired equipment" requires little comment since people understand that a fuel is a substance which is burned to release energy. Generally, when "fuel fired equipment" is discussed the conversation is about LP or natural gas fired equipment – but not always. Whether the fuel is liquefied petroleum, natural gas, diesel, gasoline, kerosene or wood chips – if the equipment that uses it is installed, construction has taken place.

Probably one of the more difficult things to understand in the definition of construction is "an alteration that alters the type of construction". Type of construction refers to the materials used to build the box (building). What goes in the box (use and occupancy) often drives what the box is made from. As inappropriate as it is to store goldfish in a cardboard box, it is inappropriate to design an auditorium holding 1200 people in a wood-framed building. Building types (type of construction) are essentially classification of construction materials based on their combustibility. Height and areas are also limited by the materials used (type of construction). A building's type will be governed by the least fire resistive (or most combustible) type of construction if types are mixed. What this means is if there was an all concrete (structurally non-combustible) auditorium housing the same 1200 people that had a wooden cover added (very combustible construction), then the addition reclassifies the building because of the added threat from fire that exists when there is more to burn. Therefore, if a building alters the type of construction the building's level of combustibility has been changed either for the better or the worse.

## What is the occupancy of the building or structure?

While building codes tends to address items such as the specifics of how to build a box (buildings and structures) the Life Safety Code and its parent code, the Uniform Fire Code are concerned about what goes into (or occupies) the box. Occupancy isn't what the box is made of but rather what is in the box. Tennessee rule <a href="https://docs.org/10.25-2-2">0.780-2-2</a> governs the codes adopted by the state of Tennessee as reviewed by the State Fire Marshal's Office. Rule 0780-2-2-.02 defines how these codes are applied. It is part of the rule that requires that building's and structure's occupancy be defined in accordance with the NFPA 101 Life Safety Code. This same rule also specifies that height and area be limited in accordance with the state adopted building code, currently the 1999 Standard Building Code.

The Plan Review Function of the Codes Enforcement Section will review based on the occupancies as defined by the Life Safety Code. Codes Enforcement Section's Plan Review function examines official construction documents prepared by registered design professionals for buildings and structures which are any of the following:

- 1. All state owned and leased facilities;
- 2. All educational occupancies (K-12), public and private;
- 3. All day care centers (including adult day-care) licensed by the Department of Human Services;
- 4. Detention and correctional facilities not state owned or leased;
- 5. Places of assembly having an aggregate capacity of 300 or more persons;
- 6. Business occupancies and residential occupancies three stories or more;
- 7. Two story residential occupancies having twelve units or more;
- 8. Covered mall occupancies;
- 9. High hazard industrial occupancies (H-1 and H-2 per SBC definition).
- 10. All facilities requiring a SFMO inspection for initial licensure.

#### Where is it located?

By default, the State Fire Marshal's Office's code adoption is applicable throughout Tennessee for just about everything except for the traditional 1 and 2 family homes, Tennessee Department of Health licensed facilities, modular structures and manufactured homes. For some of the occupancies listed above, there are some areas who have their own codes departments which comply with TCA 68-120-101(b)(2) and are referred to as "exempt jurisdictions". There is more to being an exempt jurisdiction than just having a codes

enforcement department and currently there are over 30 jurisdictions which have gone through the process with the SFMO and been granted "exempt" status. Even in exempt jurisdictions, the SFMO will still maintain authority for all state owned and leased facilities, all educational occupancies (K-12), public and private, day care centers (including adult daycare) licensed by the Department of Human Services, and facilities requiring a SFMO inspection for initial licensure.

## What are "required plans"?

Required plans are those than comply with rule <u>0780-2-3</u>; most specifically 0780-2-3-.03. While that is a very accurate statement it isn't very helpful which is precisely why the answers to the three main questions must be known to determine if your project must be submitted to Plans Review for evaluation. If the project in question 1) meets the definition of "construction" 2) is an occupancy covered by the State Fire Marshal's Office Plan Review Function (SFMO-PR) and 3) is located where the SFMO-PR maintains jurisdiction, then it must be reviewed by the Plans Review function of Codes Enforcement.

Plans required to be submitted according to rule <u>0780-2-3</u> must meet three requirements:

- 1. Bear the name, address, telephone number, and seal of an architect or engineer registered in Tennessee, and be sealed in accordance with the statutes and regulations controlling the profession of architects and engineers in Tennessee.
- 2. Be sufficiently detailed to enable the reviewer to determine accurately whether the proposed construction would be in compliance with applicable standards of fire prevention, fire protection, and building construction safety.
- 3. Be accompanied by an estimate, certified by the owner or his authorized representative, of the total construction cost of the project. The Division may request additional verification of cost prior to the issuance of a certificate of occupancy.

In addition to "Plans and Specifications", selected "Shop Drawings" must also be reviewed by Codes Enforcement. Currently, only commercial grease removal systems (kitchen hoods and duct systems) and fire protection systems (fire sprinklers) must be submitted. The particular requirements can be found below:

- Shop drawings for fire protection sprinkler systems shall be submitted in accordance with the provisions of <u>chapter 0780-2-7 (Fire Protection Sprinkler System Contractor)</u> of the Rules and Regulations of the State of Tennessee.
- 2. Shop drawings for commercial hood and duct systems shall be submitted in accordance with the standards adopted in rule <u>0780-2-2</u>, most specifically 0780-2-2.01.

## **Projects Submitted to Plans Review**

To obtain approval of a facility, submit the following information to the Nashville Office:

Two sets of plans sufficiently detailed plans sealed by an architect and/or engineer(s) registered in the state of Tennessee and a single set of sealed specifications. Plans must comply with rule <u>0780-2-3-.03</u> which means they must be complete with site, architectural, structural, mechanical, plumbing, electrical and if applicable, fire protection and commercial hood and duct scopes of work. Construction documents must be developed to comply with all applicable state adopted codes as specified in rule <u>0780-2-2</u>.

- 2. A completed Plans Review Submittal Form (PRSF) which is appropriate to the specific occupancy (day care's have a special PRSF).
- 3. A certified review fee based on the estimated cost of construction must be submitted with plans and specifications at the initial submission. Plan Review may require proof of the project cost if they have reason to doubt the accuracy of the estimate as authorized by rule 0780-2-3-.04(2).

NOTE: Plans will not be reviewed prior to ALL THREE REQUIREMENTS BEING MET! What this means is if you submit your fee, PRSF but only partial plans, your project will be held at the desk and not "officially received" until such time as the submittal requirements are met.

NOTE: Construction cannot legally begin until plans have been reviewed and approved in writing by our office and a set of "approved plans" are on site. [Rule 0780-2-3-.02]

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